argued. All in all, this is a very convincing book, easy to follow in its lines of argument, though occasionally Dr. Colp retreats to conjecture such as "may have been." For physicians interested in a good historical case study of one man's illness, plus a great deal of feeling for 19th century life and medicine, this is the book.

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THE JOINTS OF THE ANKLE—Verne T. Inman, MD, PhD, Professor Emeritus of Orthopaedic Surgery, University of California, San Francisco. The Williams & Wilkins Co., 428 E. Preston St., Baltimore (21202), 1976. 117 pages, $12.95.

This is a superb and classic monograph. It is clearly and carefully written. The author has been a premier investigator of gait for many years. He is a clinician with great proficiency in anatomy and biomechanics. The data presented have been gathered over a long period and are presented in a scholarly and well organized fashion. The book primarily deals with the ankle and subtalar joints. It dispels misconceptions about anatomy and physiology, elucidates generalizations regarding motion of the ankle and subtalar joints, and stresses individual variations. While this monograph will be of interest primarily to orthopedists, anatomists and those interested in biomechanics, it may also serve as a model of investigative techniques of joint motion.

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THE NORMAL LUNG—The Basis for Diagnosis and Treatment of Pulmonary Disease—John F. Murray, MD, Professor of Medicine and Member of the Senior Staff of the Cardiovascular Research Institute, University of California, San Francisco; Chief of Chest Division of the Medical Service, San Francisco General Hospital. W. B. Saunders Company, West Washington Square, Philadelphia (19105), 1976. 334 pages, $14.50.

Like many areas of medicine, respiration has had its own recent knowledge explosion due to major advances in anatomy, physiology, neurophysiology, biochemistry and immunology. This 334-page overview, written by an eminent chest physician, stems from the valid premise that the practice of respiratory medicine is based upon a sound understanding of normal lung function and structure and their interrelationship. Dr. Murray attempts to concisely present "as much of the new information about the lung" as possible in an informative, readable and effective format. The author has admirably succeeded in most of his 12 chapters. *The Normal Lung* is also a solid review of "classic" respiration. It, therefore, has considerable value for medical students, house staff, postdoctoral fellows and physicians in practice, as well as for basic scientists. However, preparation in some basic principles may be helpful, for example, in the chapter on ventilation. Physiologic interpretation of selected pulmonary function data is emphasized and not their method of measurement. For the latter, the reader is wisely referred to other sources.

The following topics are well explained and concisely explored: lung embryology and postnatal development, ventilation and perfusion, gas exchange, acid-base, neural regulatory mechanisms, exercise adaptations, defenses and age-related changes. The content is complete, current, accurate and generally excellent. Few overviews give much mention (let alone chapters) to new but essential areas such as pulmonary lymphatic and nervous systems, immunology and aging effects. The author repeatedly correlates structure and function and effectively uses clinical examples when they enhance the understanding of normal respiration. The individual chapter outlines are helpful to the reader as he progresses to new topics. The figures and tables are generally simple, strategically located, helpful and numerous (present in 60 percent of the book). Many previously unpublished illustrations are also present. References are quoted effectively, numerous (average of 48 per chapter) and current.

Although the immense amount of summarized data is written with authority and references, the author is the first to admit to the possible absence or controversy of certain topics, limitations of current knowledge and dangers of extrapolating animal data to the human biosystem. One is frequently stimulated by excellent, thought-provoking questions raised by the author. The few deficits in the book are mainly omissions of such matters as discussion of the occlusion pressure and breath-holding time in the chapter on regulation of ventilation. The chapter on defense mechanisms does not go "one step further" to briefly discuss the specific responses of the lung to immunologic injury. Gross anatomy is minimal. Only a single pulmonary angiographic illustration is used. Presentation of normal chest roentgenograms, bronchograms, bronchoscopic photographs and even chest computer tomographs might be effective teaching devices. Lung metabolism involving lipids, proteases and collagen is also lacking.

How does this book compare with the well-known texts on respiration? This book will not replace them, but will strongly complement and enhance any respiratory library because of its uniqueness in covering almost all aspects of normal respiration. It is complete and understandable. *The Normal Lung* is likely to become another classic.

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FLUORESCENT PROTEIN TRACING—Fourth Edition—R. C. Nairn, MD, PhD(L'pool), FRCPath, FRCPA, FRACP, FRSE, Professor and Chairman, Department of Pathology and Immunology, Monash University; Honorary Consultant Pathologist, Alfred Hospital, Prince Henry's Hospital and Queen Victoria Memorial Hospital, Melbourne, Australia; Foreword by J. R. Marrack, DSO, MC, MA, MD(Cantab), Emeritus Professor of Chemical Pathology, University of London. Longman, Inc., Churchill Livingston - Medical Division, 19 West 44th St., New York City (10036), 1976. 648 pages, $45.00.

Fluorescent methods have become standard procedures in many laboratories for the detection of protein and antibody. Although the techniques have remained relatively unchanged over recent years, the applications have expanded considerably. There are few complete reviews and texts available specifically on this subject. One of the classics is provided by R. C. Nairn. The book is well organized and extensively covers details of fluorescent procedures. Methods are discussed in detail, with attention to conjugation of proteins, properties of conjugated proteins, the theory and use of fluorescent microscopy and the use of fluorescent methods for protein and antibody studies. The color photographs provided are extremely useful for those unfamiliar with various forms of fluorescence. The appendix is useful for carrying out specific procedures which are discussed in the main text. Extensive referencing has been given. Again, this is well organized, although I would question the value of providing more than 250 pages of references. The book should be extremely useful to those laboratories engaged in fluorescent methods.

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